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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,212	09/26/2003	Maurice Smith	34171	2888

23589 7590 11/10/2010

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EXAMINER	
RIVIERE, HEIDI M	
ART UNIT	PAPER NUMBER
3689	

MAIL DATE	DELIVERY MODE
11/10/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/672,212	SMITH ET AL.	
	Examiner	Art Unit	
	HEIDI RIVIERE	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Reopening Prosecution

1. In view of the **appeal brief filed on August 16, 2010**, PROSECUTION IS HEREBY REOPENED. The more detailed 35 USC 103(a) rejection is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37CFR 1.113 (if this Office action is final); or,(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Janice A. Mooneyham/

Supervisory Patent Examiner, Art Unit 3689

Response to Arguments

2. Applicant's Appeal brief arguments filed **16 October 2010** have been fully considered but they are not persuasive.

3. Applicant argues that the Wyatt reference does not teach "the report comprising an image of the substance and identification regarding the substance as determined by the control unit".

First of all, the claimed limitation was rejected under 35 USC 103(a) under Wyatt in view of Barnes. The Wyatt reference teaches a polarization and fluorescence analyzer. (See Wyatt: col. 8, lines 40-55) Like the currently claimed invention Barnes reference teaches in the background of the invention "hyperspectral and ultraspectral imaging" and the use of an airborne imaging spectrometer and notes the use of an imaging camera. (Col. 2, lines 5-30) Barnes also teaches digitally transmitting spectral data. (col. 16) This is similar to the disclosure of page 15 of the specification which teaches "Alternatively, the mass spectrometer 42 or other similar device may provide a digital image of the spectrograph of the substance for comparison analysis in a manner similar to the digital image generated by the imaging device 40 described above."

It would be obvious to one of ordinary skill in the art at the time of the invention that the combination of Wyatt and Barnes do teach a report comprising digital images. It would be obvious to gather information to create a report. According to the Barnes reference "The system and methods advantageously provide the ability to respond to terrorist planning and actions with potential chemical/biological weapons in a more rapid and effective manner." (Col. 2, lines 1-5) The Barnes reference also notes that processed data is outputted (Col. 14, claim 26) and the system is also capable of "processing the data at the site or on a post mission basis for output back to an aircraft, satellite, ground vehicle, maritime vehicle or ground station for additional analysis,

processing review". (Col. 16, claim 34) In summary, the collected data is processed and sent to the respective parties. It would be obvious to transmit such data in a report format. Because thwarting the plans of terrorist is the focus of the Barnes disclosure, it would be obvious that respective parties would be regulatory agencies such as the Food and Drug Administration and the Bureau of Alcohol, Tobacco and Firearms.

Secondly, Barnes does teach the limitation in claim 3, which states "determining an actual geographic location of a remote sensing unit detecting the substance using the remote sensing unit, communicating the actual geographic location to the control unit, and identifying an appropriate local reporting authority and an appropriate local reporting policy based upon the actual geographic location of the remote sensing unit detecting the substance;" As noted above, the data collected is processed on site and relayed back to various interested parties. Furthermore, the Barnes reference teaches the use of GPS. (col. 2, lines 30-45) It would be obvious to send to the information gathered on counter-terrorism to a regulatory authority because such information would not be gathered only to be kept secret.

4. Thirdly, Applicant argues that Wyatt in view of Barnes does not teach "airdropping remote sensing unit". Barnes teaches remote sensing units on unmanned ground vehicles (See col. 6, lines 55-67) for the purpose of getting to areas that would be difficult for bigger vehicles and for humans. Although it is possible for such equipment to be airdropped at the desired location, airdropping is not specifically noted and therefore the rejection has been edited to include the Laufer reference that not only teaches imaging devices used to detect substances are well known in the art but also

that "ground sensors may be designed for airdrop deployment" (Col. 31, line 64-col. 32, line –; cols. 28-30)

5. Also, Applicant argues in regards to claim 3 that the prior art references used do not teach a magnified image. However, the Barnes reference does teach the magnification of an image. Fig. 9 of Barnes teaches the ability to pan and zoom at a target. Barnes notes "The ability to apply spectral sensor imagery against a target offers extreme increase in system identification capabilities through the increase in the apparent aspect angle, such as would be the case in looking at a plume on the horizon instead of straight down, as well as the ability to more effectively utilize limited onboard processing resources. In the case of the latter, hyperspectral data collection typically requires high data rates (by present day standards)" (column 4, line 60-column 5, line 35) Applicant in the specification teaches that magnified photos can be taken. Therefore, the ability of the Barnes system to zoom and pan and increase identification in the images taken would suffice to teach this limitation. The rejection in regards to 42 USC 11023 has been withdrawn as the rejection using Wyatt in view of Barnes is considered sufficient.

.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in Graham v. John Deere Co,, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: 1. Determining the scope and contents of the prior art. 2. Ascertaining the differences between the prior art and the claims at issue. 3. Resolving the level of ordinary skill in the pertinent art. 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-4, 6-8, and 10-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wyatt (US 6490530)** in view of **Barnes (US 6/422,508).**

2. **With respect to claim 1, (Currently Amended)** Wyatt discloses the steps of:

b. generating a report with the control unit (detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 -44 and a need for spectroscopic techniques was recognized in the early 1970's, col. 3, lines 5-10, col. 12, lines 20-25, "The CPU will collect and process such identification or classification results to determine other aerosol particle properties following the on-board CPU instructions." and col. 14, lines 3-11, "Such information includes estimates of threat characteristics..." and detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 - 44 and "detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25- 29);

c. uploading the report, via the control unit, to a secure remote server via a system chosen from the group consisting of a cell phone network and a satellite

phone network (detector stations capable of measuring and classifying aerosol particles, and reporting all processed data via integrated telecommunications to a central control station, col. 8 lines 29-45 and col. 3, lines 36-52, "communications/telemetry module") (See also, American Heritage Dictionary "n. The Science and technology of automatic measurement and transmission of data by wire, radio, or other means from remote sources, as from space vehicles, to receiving stations for recording and analysis");

d. notifying, via the control unit, at least some members of a hierarchy authorities, wherein the evaluation authorities, including threat response authorities and evaluation authorities, include, including a plurality of experts having knowledge relevant to making a high-level threat assessment (interpreted to be the sending of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65 - col. 14 line 3 – telemetry means used; col. 10, lines 25-40 "the telemetry means incorporated into each detector station permits data processed by the detector station's on-board computer to be transmitted in real time to the central station that monitors the evolution of the reports received from the individual stations, makes judgments as to the extent of the aerosol threat, if any, and determines the type of warning required for each region specified as protected. The central station can transmit commands to each or any of the detector stations to change local data acquisition rates and modify duty cycler, as needed. The central station also can

modify data processing protocols, i.e. the analytical software on-board each detector station.") (Examiner notes that these agencies are response and evaluation authorities.); and

e. instructing at least some members of the hierarchy of authorities, via the control unit, to access the report on the remote server via a wide area network (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3; col. 10, lines 25-40 "the telemetry means incorporated into each detector station permits data processed by the detector station's on-board computer to be transmitted in real time to the central station that monitors the evolution of the reports received from the individual stations, makes judgments as to the extent of the aerosol threat, if any, and determines the type of warning required for each region specified as protected. The central station can transmit commands to each or any of the detector stations to change local data acquisition rates and modify duty cycler, as needed. The central station also can modify data processing protocols, i.e. the analytical software on-board each detector station.") (Examiner notes that these agencies are response and evaluation authorities.).

Wyatt does teach generating a report and the citations above, Wyatt does not teach following, however **Barnes** teaches,

b. the report comprising the image of the substance and identification information regarding the substance as determined by the control unit; (Barnes: Col. 5, lines 35-67; col. 6, lines 15-40; col. 10, lines 20-50 – images are gathered, tracked and outputted; processed data is outputted (Col. 14, claim 26) and the system is also capable of "processing the data at the site or on a post mission basis for output back to an aircraft, satellite, ground vehicle, maritime vehicle or ground station for additional analysis, processing review". (Col. 16, claim 34))

a1. obtaining an image of the substance with one or more remotely controllable sensing units; a2. transmitting the image of the substance from the one or more remotely controllable sensing units to a control unit configured to automatically identify the substance; (Barnes: col. 5, line 42 – col. 6 line 45 – "The system 20 of the present invention advantageously allows for gathering and tracking images. The system 20 preferably includes a vehicle mounting interface 21 positioned to be connected to a vehicle. The vehicle mounting interface includes a remotely steerable gimbal 30 which provides at least two axis of pivotal or rotational movement. A compact pod housing 25 is pivotally mounted to the vehicle mounting interface 21 and has at least one window 26, and more preferably a plurality of windows 26,27,28,29 as illustrated in FIGS. 1-6. A spectral sensor 40 is positioned on the steerable gimbal 30 within the pod housing 25 to thereby enable off-nadir scanning, target acquisition, target tracking and analysis of spectral data through the at least one window 26 of the pod housing 25."; col. 16, claim 34 – steps of digitally transmitting spectral data)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wyatt and Barnes by including a report with images because it would provide details to be used in thwarting the plans of terrorist. Both references teach the testing of substances. Wyatt teaches an aerosol hazard characterization and early warning network. The system monitors aerosol intrusions. The Barnes system teaches a system for robotic control of remote sensing units that gather imaging data. Unmanned vehicles are used which have stearable gimbal with spectral sensor mounted. The Barnes reference also notes that processed data is outputted (Col. 14, claim 26) and the system is also capable of "processing the data at the site or on a post mission basis for output back to an aircraft, satellite, ground vehicle, maritime vehicle or ground station for additional analysis, processing review". (Col. 16, claim 34) The Barnes system is used for counter-terrorism, counter-proliferation of weapons of mass destruction and rocket tracking for example (Barnes: col. 9).In summary, the collected data is processed and sent to the respective parties. It would be obvious to transmit such data in a report format.

3. **With respect to claim 2, (Previously Presented)** Wyatt discloses a method of evaluating a threat posed by a substance, further including the steps of providing the remote server with evaluation tools for automatically evaluating, the report in light of other relevant data (interpreted to be the evaluation of the threat posed by and likely movement of the aerosol cloud by the central station, integrated with meteorological data, col. 13 lines 41 - 43, 51 - 54 and 60 - 63).

4. **With respect to claim 3, (Previously Presented)** Wyatt discloses a method of evaluating a threat posed by substance (reference provides an aerosol hazard classification and early warning network, see abstract), the method comprising the steps of:

f. deploying a plurality of remote sensing units and a control unit adapted to automatically detect and identify the substance and to provide a corresponding report, wherein the report includes a magnified image of the substance (detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 - 44 and "detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25-29);

g. uploading the report, via the control unit, to a remote server (detector stations capable of measuring and classifying aerosol particles, and reporting all processed data via integrated telecommunications to a central control station, col. 8 lines 29 - 45);

i. notifying, via the control unit, the appropriate local reporting authority of the report in accord with the appropriate local reporting policy (threat analyses are sent to various civil, police and emergency agencies, col. 13 lines 65 - col. 14 line 3);

j. determining, via the control unit, a hierarchy of threat evaluators, including a plurality of experts having knowledge relevant to making a high-level threat

assessment (interpreted to be the sending of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65 - col. 14 line 3; col. 10, lines 25-40 "the telemetry means incorporated into each detector station permits data processed by the detector station's on-board computer to be transmitted in real time to the central station that monitors the evolution of the reports received from the individual stations, makes judgments as to the extent of the aerosol threat, if any, and determines the type of warning required for each region specified as protected. The central station can transmit commands to each or any of the detector stations to change local data acquisition rates and modify duty cycler, as needed. The central station also can modify data processing protocols, i.e. the analytical software on-board each detector station.")); and

k. instructing at least some members of the hierarchy of threat evaluators to access the report on the remote server via a wide area network (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3; col. 13 line 65 - col. 14 line 3; col. 10, lines 25-40 "the telemetry means incorporated into each detector station permits data processed by the detector station's on-board computer to be transmitted in real time to the central station that monitors the evolution of the reports received from the individual stations,

makes judgments as to the extent of the aerosol threat, if any, and determines the type of warning required for each region specified as protected. The central station can transmit commands to each or any of the detector stations to change local data acquisition rates and modify duty cycler, as needed. The central station also can modify data processing protocols, i.e. the analytical software on-board each detector station.").

Wyatt discloses all the above limitation, but does not explicitly disclose wherein the determining step is provided by a GPS device located on the remote sensing unit, communicating the actual geographic location to the control unit, however **Barnes** teaches,

h. determining an actual geographic location of a remote sensing unit detecting the substance using the remote sensing unit, communicating the actual geographic location to the control unit, and identifying an appropriate local reporting authority and an appropriate local reporting policy based upon the actual geographic location of the remote sensing unit detecting the substance; (Barnes: col. 4, lines 35-45; col. 7, line 5- col. 8, line 35; col. 9; col. 11, lines1-42 – A high capacity cable is attached to the vehicle "the cable can be customized or optimized for various types of communication standards as understood by those skilled in the art; system used for counterterrorism, counter proliferation of weapons etc.; global positioning system used (GPS) data used to computed spectral sensor location; programmed inputs via processing means which uses a GUI interface)

a1. obtaining an image of the substance with one or more remotely controllable sensing units; a2. transmitting the image of the substance from the one or more remotely controllable sensing units to a control unit configured to automatically detect and identify the substance and generate a corresponding report, wherein the report includes a magnified image of the substance; (Barnes: col. 5, line 42 – col. 6 line 45 – "The system 20 of the present invention advantageously allows for gathering and tracking images. The system 20 preferably includes a vehicle mounting interface 21 positioned to be connected to a vehicle. The vehicle mounting interface includes a remotely steerable gimbal 30 which provides at least two axis of pivotal or rotational movement. A compact pod housing 25 is pivotally mounted to the vehicle mounting interface 21 and has at least one window 26, and more preferably a plurality of windows 26,27,28,29 as illustrated in FIGS. 1-6. A spectral sensor 40 is positioned on the steerable gimbal 30 within the pod housing 25 to thereby enable off-nadir scanning, target acquisition, target tracking and analysis of spectral data through the at least one window 26 of the pod housing 25."; col. 16, claim 34 – steps of digitally transmitting spectral data; Fig. 9 – pan and zooming of image)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Wyatt and Barnes by including a report with images because it would provide details to be used in thwarting the plans of terrorist. Both references teach the testing of substances. Wyatt teaches an aerosol hazard characterization and early warning network. The system monitors aerosol intrusions.

The Barnes system teaches a system for robotic control of remote sensing units that gather imaging data. Unmanned vehicles are used which have stearable gimbal with spectral sensor mounted. The Barnes reference also notes that processed data is outputted (Col. 14, claim 26) and the system is also capable of "processing the data at the site or on a post mission basis for output back to an aircraft, satellite, ground vehicle, maritime vehicle or ground station for additional analysis, processing review". (Col. 16, claim 34) The Barnes system is used for counter-terrorism, counter-proliferation of weapons of mass destruction and rocket tracking for example (Barnes: col. 9).In summary, the collected data is processed and sent to the respective parties. It would be obvious to transmit such data in a report format.

5. **With respect to claim 4, (Previously Presented)** Wyatt discloses evaluating a threat posed by a substance, further including the steps of providing the remote server with evaluation tools for automatically evaluating the report in light of other relevant data (Wyatt: interpreted to be the evaluation of the threat posed by and likely movement of the aerosol cloud by the central station, integrated with meteorological data, col. 13 lines 41 - 43, 51 - 54 and 60 - 63).

6. **With respect to claim 6, (Previously Presented)** Wyatt discloses the response authorities are chosen from the group consisting of local first responders, state agencies, state departments, regional agencies, regional departments, national departments, and national agencies (Wyatt: interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible

for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3).

8. **With respect to claim 7**, **(Previously Presented)** Wyatt discloses the evaluation authorities include experts on subjects chosen from the group consisting of medical issues relating to exposure to chemical substances, medical issues relating to exposure to biological substances, medical issues relating to exposure to radioactive substances, law, law enforcement, policy, doctrinal issues, historical cases, modeling, and simulation(Wyatt - col. 13 line 65 - col. 14 line 3: interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means,).

9. **With respect to claim 8**: **(Previously Presented)** Wyatt discloses all the above limitation, but does not explicitly disclose wherein the determining step is provided by a GPS device located on the remote sensing unit, communicating the actual geographic location to the control unit, however **Barnes** teaches:

- the image of the substance is a microscope-magnified image (Barnes: col. 5, line 42 – col. 6 line 45 – "The system 20 of the present invention advantageously allows for gathering and tracking images. The system 20 preferably includes a vehicle mounting interface 21 positioned to be connected to a vehicle. The vehicle mounting interface includes a remotely steerable gimbal 30 which provides at least two axis of pivotal or rotational movement. A compact pod housing 25 is pivotally mounted to the vehicle mounting interface 21 and has at

least one window 26, and more preferably a plurality of windows 26,27,28,29 as illustrated in FIGS. 1-6. A spectral sensor 40 is positioned on the steerable gimbal 30 within the pod housing 25 to thereby enable off-nadir scanning, target acquisition, target tracking and analysis of spectral data through the at least one window 26 of the pod housing 25."; col. 16, claim 34 – steps of digitally transmitting spectral data)

It would have been obvious and predictable to one of ordinary skill in the art at the time of the invention to substitutie the known step of magnifying a spectral image in order to result in the same image in larger form. This use of this system would still provide data acquisition from a remote place.

11. **With regards to claim 11**: **(currently amended)** Wherein the remote sensing units act upon hitting ground to properly position various operational elements of remote sensing units for sample collection. (Barnes: col. 4, lines 5-67 – system steered by operator; col. 5, line 42 – col. 6 line 45 – "The system 20 of the present invention advantageously allows for gathering and tracking images. The system 20 preferably includes a vehicle mounting interface 21 positioned to be connected to a vehicle. The vehicle mounting interface includes a remotely steerable gimbal 30 which provides at least two axis of pivotal or rotational movement. A compact pod housing 25 is pivotally mounted to the vehicle mounting interface 21 and has at least one window 26, and more preferably a plurality of windows 26,27,28,29 as illustrated in FIGS. 1-6. A spectral sensor 40 is positioned on the steerable gimbal 30 within the pod housing 25 to thereby enable off-nadir scanning, target acquisition, target tracking and analysis of

spectral data through the at least one window 26 of the pod housing 25."; col. 16, claim 34 – steps of digitally transmitting spectral data)

It would have been obvious and predictable to one of ordinary skill in the art at the time of the invention to combine the teachings of Wyatt and Barnes. Both references teach the testing of substance identification. Wyatt teaches an aerosol hazard characterization and early warning network. The system monitors aerosol intrusions via the use of unmanned. The Barnes system teaches a system for robotic control of imaging data having stearable gimbal mounted on spectral sensor and methods. The system is robotic controlled and highly mobile to make the collection of sample in areas not safe for humans possible.

16. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wyatt** as in view of **Barnes** and further in view of **Ishizaka et al. (U.S. 5,077,010)** (Hereinafter referred to as **Ishizaka**).

17. **With respect to claim 9, (Previously Presented)** Wyatt discloses the above method steps, Wyatt does not explicitly further comprising collecting the substance with a sample examination cassette including: a roll of filter paper for receiving the substance; a roll of film providing an impermeable barrier for isolating the substance; and an archive spool for collecting the roll of filter paper and the roll of film. However, Ishizaka teaches a long- test-film cassette for biochemical analysis and system for loading the same which teaches a roll of filter paper for receiving the substance (Ishizaka, Fig 1, item 7); a roll of film providing an impermeable barrier for isolating the

substance (Ishizaka, Fig 1, item 3); and an archive spool for collecting the roll of filter paper and the roll of film (Ishizaka, Fig 1, item 2).

It would have been obvious and predictable to one of ordinary skill in the art at the time of the invention to combine the teachings of Wyatt, Barnes and Laufer because the ability to collect samples remotely and analyzed using the film speeds up the research process and fulfills the goal of protecting humans from the unknown..

12. **Claim 10** is also rejected under 35 U.S.C. 103(a) as being unpatentable over **Wyatt** in view of **Barnes** and further in view of **Laufer (US 6/853,452 B1).**

13. **With regards to claim 10: (Previously Presented)** Wyatt/Barnes the use of remote vehicles to gather spectral information on substances. Wyatt/Barnes does not teach that these vehicles can be airdropped, however Laufer teaches wherein the remote sensing units are deployed by being airdropped into an area containing a potentially hazardous substance (Laufer: col. 31, line 64-col. 32, line – "ground sensors may be designed for airdrop deployment"; cols. 28-30 – imaging device used to detect substances)

It would have been obvious and predictable to one of ordinary skill in the art at the time of the invention to combine the teachings of Wyatt, Barnes and Laufer because airdropping the vehicles would be part of the effort to protect human beings and do remote testing. All three references teach the collection of data related to substances. Wyatt teaches an aerosol hazard characterization and early warning network. The system monitors aerosol intrusions. The Barnes system teaches a system for robotic

control of imaging data having stearable gimbal mounted on spectral sensor and methods. The system is robotic controlled and highly mobile. The Barnes system teaches the use of unmanned ground vehicles and unmanned aerial vehicles remotely controlled to avoid systems that are harmful to humans. The gas and images are tracked and uploaded. The unmanned vehicle is remotely controlled and avoids situations that are harmful to people. The airdropped deployment noted in Laufer is ideal "to monitor compliance [and] covert activities".

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heidi Riviere whose telephone number is 571-270-1831. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. R./
Examiner, Art Unit 3689